

V *Notes on the Thynnidæ, with remarks on some aberrant genera of the Scoliidæ.* By ROWLAND E. TURNER.

I HAVE recently dealt with the Thynnidæ of Australia, and now offer some remarks on those of South America, together with descriptions of a few new species and some notes on the Scoliid genera *Iswara* and *Anthobosca*, which are in my opinion most nearly related to *Myzine*. I cannot at present undertake a full revision of the Thynnidæ of South America owing to the want of sufficient material, and also to the impossibility of identifying the majority of Klug's species without a full examination of the types.

The females, except in the genus *Ælurus*, Klug, have the palpi fully developed as to the number of joints, that is, maxillary palpi six- and labial palpi four-jointed, differing markedly in this particular from the bulk of the Australian Thynnidæ. The clypeus in the male is usually emarginate, sometimes very broadly as in typical *Elaphroptera*, sometimes narrowly and deeply as in typical *Scotæna*. The name *Elaphroptera* given by Guérin (1839) has usually been used for the bulk of the South American species, though the name *Scotæna* given by Klug (1810) has priority, and should have been retained if the species were regarded as forming one genus only. Ashmead has recently ("Canadian Entomologist," 1903) attempted a detailed classification, but being based on the differences in the hypopygium it must be considered as almost valueless; such differences, though of importance as specific distinctions, being of little or no value for broader classification, and not usually running on parallel lines with the characters of the females.

In all the males which I have been able to examine the labrum, though varying much in shape, is produced from below near the apex so as to form a more or less transverse trough at the apex; a peculiarity which does not, as far as I know, occur in any Australian species. The mandibles of the males vary much in form, and will probably prove to be one of the most useful characters for classification. They are usually bidentate, sometimes simply curved; but in many cases, as in typical *Elaphroptera*, strongly elbowed. In the genus *Telephoromyia* the

mandibles are tridentate, or, in one or two Peruvian species which I have placed provisionally in that genus, very irregular and broad, with three or more teeth. In the present state of our knowledge any attempt at classification must be of a very provisional nature, and I do not think it advisable to form new genera at present. I apply the name *Scotæna*, Klug, to the species in which the males have the mandibles bidentate, not elbowed, the clypeus narrowly and more or less deeply emarginate, and the hypopygium usually blunt. *Ornepetes*, Guér., and *Spilothynnus*, Ashm., do not seem to differ very much, and I do not see that *Spilothynnus* can be retained as a distinct genus; *Ornepetes* seems to be very near *Scotæna*, but may be retained as a sub-genus at least. The typical species of *Scotæna* have the abdominal segments constricted at the base, which is not the case in *Ornepetes*. *Telephoromyia*, Guér., may be distinguished by the mandibles, which have three or more teeth, the clypeus usually with a small depression at the apex, giving an appearance of emargination, the hypopygium is always unarmed. The females which I class with this genus have the pronotum much longer than broad and not excavated, the prosternum produced anteriorly and forming a neck, the first abdominal segment narrow at the base, the second transversely carinated, and the pygidium truncate. With this genus I would include the two species described by Weyenbergh (Berlin Ent. Zeit., xxvii, 281, 1883) as *Tachypterus argentinus* and *cordoviensis*. The males seem to differ from *Telephoromyia* only in the point of junction of the second recurrent nervure; the female is not available to me, and the description is too poor to be of much use, but shows that it cannot belong to *Diamma*. *Pseudelaphroptera*, Ashm., and *Anodontyra*, Westw., seem to me to be rather closely related to each other, but should certainly be kept as distinct genera until more material is available. In some of the females of the former genus the anterior ocellus is present, though very small. I follow André in considering that *Pycnothynnus*, Ashm., should be sunk in *Elaphroptera*, though that genus may have to be subdivided. *Klugianus*, Ashm., will probably stand as a good genus, but the female is still unknown. The genus *Amblysoma*, Westw., appears to be quite distinct, but I have not seen specimens. *Ælurus*, Klug, forms another group with very distinct females.

*Thynnus luzonicus*, n. sp.

♂. Antennæ shorter than the thorax. Clypeus very prominent and almost pointed at the base, deflexed to the apex and very broadly truncate. Mandibles blunt at the apex, the tooth on the inner margin very slightly developed. Head closely and rather finely punctured, the interantennal prominence touching the base of the clypeus; the front with a median longitudinal sulca not quite reaching the anterior ocellus. Thorax closely punctured, most finely on the pronotum and on the sides of the mesonotum. Scutellum broadly rounded posteriorly, with a slight subtuberculate prominence on the middle of the apical margin; the postscutellum covering the median segment, which is vertically truncate. Abdomen shining, sparsely but rather deeply punctured; elongate conical, the first segment as broad as the second and vertically truncate anteriorly; the sixth ventral segment with a spine on each side at the apical angles. The dorsal plate of the epipygium is produced from the base, rounded at the apex and longitudinally striated. Hypopygium with a stout spine on each side near the basal angles, thence rather broadly produced and truncate at the apex with a broad apical spine; obliquely striated above.

Black; the clypeus, the mandibles except at the apex, the inner orbits of the eyes, not reaching the summit, a narrow line behind but not touching the eyes, two large spots between the antennæ, a small spot on each side on the vertex, the margins of the pronotum narrowly, a spot on the mesopleuræ below the anterior wings, another above the base of the intermediate coxæ, the tegulæ, a short oblique line behind them, a longitudinal line on each side on the posterior half of the disc of the mesonotum, a broad transverse band on the middle of the scutellum and a spot at each of its basal angles, the postscutellum, the truncation of the median segment and a large spot on the sides, a broadly interrupted transverse band near the middle of the four basal abdominal segments, a spot on each side on the fifth and sixth segments, a spot at the apex of the first ventral segment and one on each side on segments 2-5, the anterior coxæ beneath, the apex of the intermediate and posterior coxæ and the femora beneath yellow. Tibiæ and tarsi ferruginous. Wings hyaline tinged with yellow, nervures black.

Length 21 mm.

*Hab.* ALBAY, S.E. Luzon (*Whitehead expedition*).

Type in B. M.

This is a true *Thynnus* of the typical group, and is interesting as extending the range of the genus far beyond the limits hitherto recorded.

*Thynnus siccus*, n. sp.

♂. Clypeus much produced, broadly truncate at the apex and irregularly longitudinally striated. Labrum narrowed to the apex, projecting much beyond the clypeus. Antennæ as long as the head and thorax combined. Head rather small, narrower than the thorax, closely and finely punctured, the interantennal prominence broadly V-shaped and a short longitudinal carina between the antennæ. Thorax finely and closely punctured; the pronotum very broadly, but slightly, emarginate anteriorly; the scutellum rounded at the apex, the postscutellum covering the median segment which is vertically truncate. Abdomen closely punctured; the three basal segments of about equal breadth, the first vertically truncate anteriorly. A very short spine on each side at the apical angles of the sixth ventral segment. Dorsal plate of the epipygium produced from the base and longitudinally striated. Hypopygium longitudinally striated above, with a spine on each side near the base, thence narrowly produced, subtruncate at the apex, with an acute apical spine.

Light yellow; the antennæ, a broad band on the vertex between the eyes, advanced in the middle and surrounding the ocelli, connected on each side with a longitudinal line reaching the base of the antennæ, a spot on each side of the clypeus below the base of the antennæ, the short frontal carina, a small oblique spot on each side of the pronotum, the sides of the mesonotum and a large semi-circular mark on the anterior margin, the mesosternum, the basal and apical margins of the six basal abdominal segments and the whole of the seventh segment black. Wings hyaline, nervures fuscous.

Length 17 mm.

*Hab.* KILLALPANIMA, east of Lake Eyre, S.A. (*H. J. Hillier*).

Type in B. M.

*Telephoromyia peruviana*, n. sp.

♂. Mandibles very broad, slightly but very broadly emarginate on the basal half of the outer margin, curved inwards near the apex and terminating in an acute tooth; a tooth on the inner margin at the base of the apical tooth and another above it near the middle of the inner margin, the margin between the two teeth forming a sharp cutting edge; another prominent tooth above, the mandible from the outer margin to the tooth nearly half as broad as the total length, the inner margin sharply angulated at the last tooth, the apical

portion bent downwards. The portion of the margin on which the teeth are situated might perhaps be more correctly described as a very broad apical margin. Clypeus shining, depressed and transverse, deeply depressed on the middle of the apical margin giving the appearance of a narrow emargination with a low tubercle on each side at the base of the emargination. The maxillæ are slender, the galea small with the usual dividing membranous line rather indistinctly marked; the first joint of the maxillary palpi is very short, the three apical joints rather longer and more slender than the second and third; the labial palpi are four-jointed, the basal joint much the longest; the labrum is short and transverse, broadly truncated and ciliated at the apex, expanding from beneath and from the angles into a depressed, subconcave and rounded process, projecting far beyond the true apical margin. Antennæ about as long as the head and thorax without the median segment, nearly as far from each other at the base as from the eyes, the six apical joints arcuate. Head, thorax and sides of the abdomen with thin grey pubescence, cinereous on the front. Head finely and very closely punctured, with an obscure, longitudinal, frontal carina not reaching the base of the clypeus. Pronotum narrower than the head, short and narrowed anteriorly, the anterior margin slightly raised. Mesonotum and median segment closely and finely punctured; scutellum shining and sparsely punctured, slightly raised above the mesonotum. Median segment rounded, with a faintly-depressed line from the base not reaching the apex; a short, deeply-impressed, longitudinal sulca on each side at the apex. Abdomen elongate, nearly half as long again as the head and thorax combined, shining and very sparsely punctured; the first segment with a deep sulca from the base to the middle; the segments are not constricted at the base. Hypopygium narrow and rather long, rounded at the apex, the sides almost parallel.

Black; the mandibles, except the margins very narrowly and the apex, the clypeus, a large triangular spot between the eye and the base of the antenna, an oblique spot above the base of each antenna, a small spot on the inner orbit near the summit of the eye, the cheeks with a narrow continuing line broadly interrupted in the middle on the posterior margin of the head, the margins of the pronotum narrowly interrupted in the middle, the anterior margin broadly interrupted on the sides, a spot on the disc of the mesonotum, a curved line above the tegulæ, an irregularly-curved band on the mesopleuræ, a spot before the base of the intermediate coxæ, a large spot on the scutellum and a small spot at the anterior angles, a line on the postscutellum narrowly interrupted on the sides, a broad longitudinal and slightly oblique band on each side of the median



segment, a small spot at the apex of the median segment, a large round spot on each side of the six basal abdominal segments, usually very narrowly emarginate at the base, a spot on each side of ventral segments 2-5, and the coxæ and femora beneath bright yellow; the spines of the tibiæ testaceous. Wings hyaline, nervures black, the stigma ferruginous. The third cubital cell is very much longer than the second, and receives the second recurrent nervure at about one-third of the distance from the base.

Length 13 mm.

♀. Mandibles simple, without teeth. Clypeus broadly emarginate at the apex. Antennæ inserted close to each other, with a small deeply-hollowed space on each side above the base nearly reaching the eyes. Head in front more than half as broad again as long, strongly rounded posteriorly, very closely and finely punctured, with a short, median, frontal sulca. Maxillary palpi six, labial palpi four-jointed, shorter and more slender than in the male. Thorax finely and sparsely punctured; the prothorax subcylindrical, longer than broad, slightly narrowed posteriorly, the anterior margin straight; the prosternum produced anteriorly and forming a neck for the attachment of the head which is widely separated from the pronotum. Median segment obliquely sloped from the mesonotum, the surface flat and almost smooth, with a delicate carina from the base to the apex and the lateral margins slightly raised, broadened from the mesonotum. Abdomen strongly convex, much broader than the thorax, shining and very sparsely punctured; the basal segment narrowed and rather short, the apical margin depressed, most broadly at the sides; second segment with two transverse carinæ, the apical margin also raised, the carina nearest the base curved at the sides; the following segments narrowly depressed on the apical margin. Pygidium truncate posteriorly, the surface of the truncation small and subtriangular, with a tuft of hairs on each side; the hypopygium expanding and rounded at the apex.

Black; the mandibles, antennæ, legs, pygidium and the carinæ on the second abdominal segment ferruginous brown; a large semi-circular spot on each side above the base of the antennæ and the anterior and intermediate femora beneath pale yellow; the apex of the second abdominal segment and the sides of all the segments testaceous.

Length 8 mm.

*Hab.* URUBAMBA, Peru, 9000-10,000 feet.

It may be necessary to form a new genus for this species and the next, but it is certainly not advisable to do so while the female of typical *Telephoromyia* is unknown.

In some respects the males approach those of *Scotæna*, of which the females are still unknown, but the mandibles and clypeus are very different.

*Telephoromyia excisa*, n. sp.

♂. Mandibles bidentate at the apex, the exterior tooth long and acute and bent inwards, the interior tooth short and rather blunt, from the base of the teeth the mandibles are much broadened towards the base and produced on the interior margin into a broadly triangular tooth, which when the mandibles are closed fits into the emargination of the clypeus. Clypeus broadly but very shallowly emarginate, smooth and shining, with an obscure tubercle at the base. Head rather small, scarcely broader than the mesonotum, finely and very closely punctured, with a short longitudinal carina above and between the base of the antennæ, with a very delicate impressed line on each side of it touching the base of the antennæ. The antennæ as long as the head, thorax and median segment combined, the six apical joints strongly arched, the second joint of the flagellum shorter than the third. The whole head thinly clothed with long pubescence, black above, grey beneath. Thorax rather more coarsely and sparsely punctured than the head, the pronotum depressed anteriorly, the scutellum long. Median segment very shallowly transversely rugulose, as long as the mesonotum, with a short longitudinal depression on each side at the apex. Abdomen slender and elongate, about one-third longer than the rest of the insect, shining and very sparsely punctured, the first segment long narrowed at the base, with a slight tubercle on each side at one-third from the base, and with a median sulca from the base not reaching the middle. Epipygium strongly punctured at the apex, deflexed and produced, covering the hypopygium and deeply emarginate at the apex. Hypopygium narrow, obtuse at the apex.

Black; the mandibles except at the apex, the clypeus except the anterior margin, a small spot at the summit of the eyes, the margins of the eyes below the base of the antennæ, a triangular spot on the scutellum, a transverse spot on the postscutellum, a large irregular spot occupying the sides of abdominal segments 1-6, enclosing a small black spot on segments 2-5, a spot on each side of ventral segments 2-5, a line beneath the intermediate and posterior femora, and the anterior tibiæ except at the apex yellow; the intermediate and posterior tibiæ and tarsi fusco-ferruginous, the anterior tarsi fusco-ferruginous at the base, the three apical joints fuscous. Wings hyaline, faintly iridescent, nervures black, the stigma ferruginous.

The branch nervure dividing the first cubital cell is only indicated by a scar.

The three apical joints of the maxillary palpi are longer and slenderer than the others.

Length 17 mm., exp. of wings 31 mm.

*Hab.* PERU.

Type in Oxford University Museum.

Allied to the last species, but differs in the form of the mandibles and clypeus, as well as in colour and size.

*Telephoromyia bituberculata*, n. sp.

♀. Mandibles simple, rather short; labrum prominent; maxillary palpi short, six-jointed; labial palpi short, four-jointed. Clypeus truncate at the apex. Head about half as broad again as long, rounded at the posterior angles, twice as broad as the pronotum, finely and closely punctured, with a short, median, longitudinal sulca on the front. Pronotum narrow, longer than broad, the sides almost parallel, strongly convex; the prosternum narrowly produced anteriorly, forming a neck; the anterior angles of the pronotum slightly produced. Mesonotum very small and narrowed posteriorly; the median segment depressed, subtriangular, narrowly truncate at the base, the dorsal surface flat. Thorax and abdomen shining and sparsely punctured, most strongly on the abdomen. First abdominal segment compressed at the sides and strongly elevated to the middle which is subcarinate longitudinally, strongly produced anteriorly on the dorsal surface and overlapping the median segment for nearly half its length, pointed at the extremity and produced into a short bifurcate process. Second segment much broader than the first, with two strong transverse carinae, curving forward at the sides, the space between the second carina and the apex almost smooth, the apical margin slightly raised. All the segments, except the second, narrowly depressed on the apical margin. Pygidium small, the epipygium ovate, finely rugose, surrounded by a dense fringe of rather short fulvous pubescence, almost vertically truncate, hypopygium produced, abruptly widened close to the apex and truncate. The ventral segments more strongly punctured, segments 2-4 with a large broadly triangular depressed surface in the middle of the apical margin. Intermediate coxæ widely separated, the intermediate and posterior tibiae hollowed externally near the apex and strongly pubescent. Tarsal ungues bifid.

Black; a large spot on each side on the front round the base of the antennæ, produced at the sides into a narrow line extending to



the vertex, the sides of the head and the anterior margin of the clypeus pale lutaceous yellow; the mandibles, antennæ, the carinæ on the second abdominal segment, the pygidium, the tibiæ obscurely and the tarsi dull ferruginous brown; the apical margins of the abdominal segments above and beneath testaceous.

Length 8 mm. ♂ unknown.

*Hab.* MENDOZA, Argentina. (Purchased from *H. Rolle.*)

Distinguished from all other species known at present by the form of the first abdominal segment.

*Scotæna turbulenta*, n. sp.

♂. Mandibles not elbowed, bidentate, the outer tooth rather long and broad, the inner tooth very short and blunt. Clypeus deeply and rather broadly triangularly emarginate, the apical angles produced. Antennæ a little longer than the head, thorax and median segment combined, the seven apical joints arcuate, inserted about as far from each other as from the eyes. Head strongly punctured, no broader than the mesonotum. Thorax rather sparsely punctured; the pronotum short with the anterior margin raised; the scutellum broadly rounded at the apex, with a depressed transverse row of large punctures at the base. Median segment shining, very shallowly punctured, a little longer than the mesonotum. Abdomen elongate and slender, shining and sparsely punctured; segments 2-5 constricted at the base and very narrowly depressed on the apical margin; the basal segment very slender at the base with a minute tubercle on each side near the middle and a deep median sulca from the base reaching beyond the middle. Epipygium very deeply punctured and narrowly rounded at the apex; hypopygium narrow and short, not projecting beyond the epipygium and truncate at the apex. The claspers are rather long and pointed.

Black; the mandibles except at the apex, the clypeus, a spot above the base of each antenna, the margins of the eyes as high as the base of the antennæ, and a narrow line on the inner margin of the eyes near the summit, a transverse line on each side on the posterior margin of the head, the posterior margin of the pronotum, a spot on each side of the prothorax, a small round spot on the mesonotum, a curved line above, the tegulæ, a curved spot below the base of the anterior wings and two smaller spots below it, a spot on the scutellum and one on each side at its basal angles, the postscutellum, a spot on the sides of the median segment at the base, two longitudinal marks on the median segment sharply curving outwards towards the apex, a narrow transverse band near the apex of the first abdominal

segment, a transverse spot on each side of segments 2-4 above and below and a small spot on each side of the fifth segment, the coxæ beneath and a line beneath the femora yellow. Wings hyaline, very slightly tinted with yellow, iridescent, with a faint fuscous cloud in the radial cell, nervures black, stigma and costa ferruginous.

Length 17 mm., exp. 29 mm.

*Hab.* CARACAS, Venezuela. Type in Oxford University Museum.

*Pseudelaphroptera rollei*, n. sp.

♂. Clypeus moderately produced, narrowed to the apex, where it is very feebly emarginate and produced into a minute tooth at each of the apical angles; a depressed longitudinal sulca from the base almost reaching the apex. Antennæ inserted far apart, nearly half as far again from each other as from the eyes, as long as the head and thorax, not including the median segment, the second joint of the flagellum a little shorter than the third. Head closely punctured, with thin grey pubescence on the clypeus and the front, a very delicate longitudinal carina between the antennæ continued very faintly to the anterior ocellus. Mandibles bidentate at the apex, not elbowed, the outer tooth longer than the inner. Pronotum almost as broad as the head, slightly and broadly emarginate anteriorly, the anterior margin feebly raised. Thorax punctured, closely on the sides of the mesonotum and between the two longitudinal lateral sulcæ, elsewhere sparsely. Median segment broad, a little shorter than the mesothorax, finely and rather irregularly transversely striated. Abdomen as long as the head, thorax and median segment combined, nearly as broad as the thorax and tapering very slightly at the extremities, deeply and rather sparsely punctured. Hypopygium rather broad, produced slightly beyond the epipygium, subtruncate at the apex with a strong, acute apical spine.

Black; the base of the mandibles, the clypeus, the pronotum except a black triangular mark on each side, a large spot on the mesonotum, the tegulæ, a large irregular spot on the mesopleuræ, a large spot on the scutellum and a spot on each side at its basal angles, a transverse line on the postscutellum with a spot on each side, two oblique bands on the median segment diverging from the base, a broad band on each of the dorsal segments of the abdomen interrupted in the middle, except the seventh segment, which is wholly black, a small spot on each side of the first ventral segment and an interrupted band on segments 2-5, the anterior and posterior coxæ beneath and a line on the anterior and intermediate femor;

beneath pale yellow; legs ferruginous. Wings hyaline, nervures ferruginous. The second recurrent nervure is interstitial with the second transverse cubital nervure.

Length 15 mm.

*Hab.* MENDOZA, Argentina. (Purchased from H. Rolle.)

In colour and size this species resembles *Telephoromyia rufipes*, Guér., which occurs in the same locality. It is not very near typical *Pseudelaphroptera*, and I place it in the genus with doubt.

*Pseudelaphroptera flavomaculata*, André.

Zeitsch. Hym. Dipt., vi, p. 311, 1904.

A male of this species in the Oxford University Museum has the third transverse cubital nervure very short and connected with the summit of an arched nervure which originates on the cubital nervure at the junction of the second recurrent nervure, and rejoins the cubital nervure far beyond the usual termination of the third cubital cell. The extra cell thus formed is slightly longer on the cubital nervure on the left wing than on the right. There is another normal specimen in the same collection; both specimens being from Concepcion.

The females of some species of this genus have the anterior ocellus present, though small and situated at the bottom of a deep puncture; this is the case in *P. chilensis*, Sauss. In *Diamma*, Westw., the female has all three ocelli developed, but in other Thynnidæ they are always absent.

*Elaphroptera avida*, n. sp.

♂. Mandibles bidentate, broadened towards the apex, the inner tooth short, the outer one long and bent inwards. Maxillary palpi six-jointed, the first joint very short, joints 3-5 broadened to the apex and obliquely truncate. Labial palpi stout, four-jointed, the first joint a little longer than the others, the apical joint elongate ovate. Labrum short and broad, with a high transverse carina broadly and deeply emarginate and strongly ciliated at the sides, the area in front of the carina to the apex depressed, membranous and broadly emarginate at the apex. Clypeus punctured, with a large, smooth, semicircular depression in the middle, broadly emarginate at the apex with the angles pointed. Antennæ as long as the thorax

and median segment combined, inserted rather far apart, as far from each other as from the eyes, the five apical joints slightly arcuate; the interantennal prominence transverse at the apex, with a very slight tubercle in the middle; an obscure carina from the anterior ocellus reaching almost to the base of the clypeus. Head closely and rather finely punctured, the eyes diverging towards the clypeus; vertex broad, the posterior ocelli twice as far from the eyes as from each other. Thorax and median segment closely punctured; pronotum short, narrower than the head, the anterior margin slightly raised; the mesonotum about one-third broader than long, with the usual two longitudinal sulcæ on each side; the scutellum moderately elevated; the median segment rounded, as long as the breadth at the base, with a longitudinal sulca on each side at the apex. Abdomen slender, half as long again as the head, thorax and median segment combined, closely and shallowly punctured, some of the punctures confluent; the first segment slender at the base, with a short longitudinal sulca not quite reaching the centre, segments 2-5 with a feebly depressed transverse line close to the base; the epipygium narrowed towards the apex and subtruncate. Hypopygium narrow, with almost parallel sides, projecting a little beyond the epipygium and rounded at the apex.

Black; the mandibles except at the apex, the clypeus, the cheeks, the inner orbit of the eyes not reaching the summit, a small spot above the base of each antenna, the anterior margin of the pronotum and an arched line behind it touching the anterior margin in the middle, a large spot in the middle of the scutellum and a small one at each at its basal angles, the postscutellum, a round spot on each side near the apex of the median segment, a spot on each side of each abdominal segment, occupying almost the whole length of the segment but hardly extending onto the dorsal surface and a narrow line on the femora beneath yellow; the seventh segment ferruginous at the apex. Wings flavo-hyaline, nervures ferruginous.

Length 20 mm.

*Hab.* TUCUMAN, N.W. Argentina (*H. Schulz*).

Nearly allied to *Thynnus lateralis*, Klug, but the shape of the median segment is very different and the whole insect is of slenderer build.

*Elaphroptera ichneumonca*, Klug.

*Thynnus ichneumoneus*, Klug, Physik. Abh. Akad. Wiss. Berlin, p. 25, n. 22, 1840 (1842), ♂.

*Thynnus elegans*, Sm., Cat. Hym. B. M., vii, p. 51, n. 176, 1859, ♂.

*Elaphroptera maculipennis*, Guér.

*Elaphroptera maculipennis*, Guér., Voy. Coq. Zool., ii, 2, p. 243, 1830 (1839), ♂.

*Thynnus mystacinus*, Klug, Physik. Abh. Akad. Wiss. Berlin, p. 27, n. 28, 1840 (1842), ♂.

*Thynnus ornatus*, Klug, l. c., p. 29, n. 31, ♀.

*Thynnus plagiatus*, Sm., Cat. Hym. B. M., vii, p. 52, n. 178, 1859, ♂.

There are two pairs from Parana in the British Museum collection. The female agrees well with Klug's description of *ornatus*, the males are without the yellow spot on the mesonotum which is present in the type of Smith's species.

The three species last named are allied to *lateralis*, Klug, *E. ichneumonea* and *E. avida* most closely so. They will probably form a new genus when more material is available, in view of the short, broadly emarginate clypeus of the male, produced into a spine at the angles; and the straight, short and narrow hypopygium. The females of the group seem to be distinguished by a more or less excavated pronotum and a rather narrow pygidium.

*Elaphroptera herbstii*, André.

*Elaphroptera herbstii*, André, Zeitsch. Hym. Dipt., 6, p. 308, n. 5, 1904, ♂.

♀. Head very little more than half as long as broad, the posterior angles slightly rounded; eyes small and oval, divided by a little less than their own length from the base of the mandibles. Head, thorax and median segment sparsely punctured; pronotum half as broad again as long, the sides parallel, the anterior margin straight, deeply and broadly depressed in the middle. Median segment sparsely punctured at the base, where it is only half as wide as the pronotum, short, obliquely truncate posteriorly and broadened to two-thirds of the width of the pronotum, the surface of the truncation almost smooth and slightly concave, with a strong median carina on the apical half. Abdomen longer than the head and thorax, convex above, flattened beneath, finely and shallowly punctured, broadest at the third segment, which is nearly twice as wide as the pronotum; the apical margin of the basal segment feebly depressed; the second segment transversely rugose, the apical margin raised, smooth at the



base with a low transverse carina before the rugose area ; third and fourth segments with an impressed transverse line near the base, the extreme base smooth. Pygidium twice as long as broad, obliquely depressed, longitudinally rugose and a little widened to the apex. The posterior femora flattened above and curved at the apex.

Opaque black, the head shining ; two large quadrate spots narrowly separated from each other on the front round the base of the antennæ ochreous ; the flagellum and the pygidium at the apex fuscous.

Length 10 mm.

In the British Museum.

*Elaphroptera intaminata*, Sm.

*Thynnus intaminatus*, Sm., Descr. n. sp. Hym., p. 173, n. 41, 1879, ♂.

*Thynnus (Elaphroptera) holomelas*, André, Voy. Belgica. Zool. Hym., p. 61, pl. ii, fig. 8, ♂.

*Elaphroptera erythrura*, Spin.

*Thynnus erythrurus*, Spin., Gay Hist. Fis. Chile Zool., vi, p. 295, 1851, ♂.

*Elaphroptera relicta*, Sauss., Reise d. Nov. Zool., ii, 1, Hym., p. 126, 1867, ♀.

There is a pair of this species in the British Museum, showing that Saussure was right in his suggestion that they are the sexes of one species.

*Elaphroptera arcuata*, n. sp.

♂. Clypeus closely and rather coarsely punctured, strongly convex at the base, with a prominent median carina, very strongly and broadly emarginate at the apex. Antennæ as long as the thorax and median segment combined, as far from each other at the base as from the eyes, the seven apical joints are arcuate. Head finely and closely punctured, with a delicate carina from a little below the anterior ocellus reaching almost to the base of the clypeus ; the posterior ocelli half as far again from the eyes as from each other ; the front and cheeks clothed with long, sparse, cinereous pubescence. Mandibles sharply bent just before the middle, with a slight tubercle at the bend, bidentate at the apex, the inner tooth very short. Pronotum short, rounded at the sides, the anterior margin straight and raised. Thorax and median segment closely and rather finely

punctured, very shallowly on the median segment; the usual two longitudinal sulcæ on each side of the mesonotum; the scutellum subtriangular, rather narrowly truncate at the apex. Median segment rather slender, depressed and narrowed to the apex. The sides of the thorax and median segment with long, sparse, cinereous pubescence. Abdomen shining, almost entirely smooth, slender, a little longer than the head, thorax and median segment combined; the first segment very narrow at the base, about half as wide at the apex as long, the apical margin rather widely depressed. Epipygium long, sparsely punctured, rounded at the apex; hypopygium not projecting beyond the epipygium, trilobed, the central lobe the longest. The second recurrent nervure is received a little before the middle of the third cubital cell.

Entirely black. Wings hyaline, faintly iridescent, nervures fuscous. Length 11 mm., exp. 19 mm.

*Hab.* LAGO XANCO, Chubut.

Type in B. M.

Nearly allied to *E. herbstii*, André, from Chili, but is without a tubercle at the base of the clypeus, and the median segment and first abdominal segment are much slenderer in the present species.

*Elaphroptera inca*, n. sp.

♂. Mandibles long, bent inwards near the apex, bidentate, the outer tooth very long, the inner one short. Maxillary palpi six-jointed, the first joint very short, the third broad and rather short, the second, fifth and sixth of almost equal length, about half as long again as the third, the fourth joint the longest. Labial palpi four-jointed, the second and third joints short and stout, together about as long as the first. Labrum very long and slender, petiolate, expanding abruptly at the apex in a semicircle, truncate at the extreme apex and fringed with long hairs, produced from beneath near the apex, the lower portion truncate and extending as far as the true apex, forming with it a narrow transverse trough. Clypeus sparsely punctured, rather narrow, very much produced and subtruncate at the apex, with a shallow depression on each side below the centre, and a smooth, shallow, semicircular depression just above the centre. Antennæ as long as the head, thorax and median segment combined, the six or seven apical joints feebly arcuate. Head rather small, a little narrowed behind the eyes, finely and closely punctured; the interantennal prominence transverse at the apex, divided by a deep sulca; a little sparse and rather long black

pubescence on the front. The posterior ocelli twice as far from the eyes as from each other. Thorax closely and finely punctured, more sparsely on the disc of the mesonotum and on the scutellum; pronotum much narrowed in front, the anterior margin slightly raised; mesonotum with the usual two longitudinal sulcæ on each side, as long as broad; scutellum rounded at the apex, raised in the centre; median segment as long as the mesonotum, very shallowly punctured, with a deep longitudinal depression on each side near the apex. Abdomen slender, about one-third longer than the head, thorax and median segment combined, very sparsely punctured; the first segment slender at the base, with a deep longitudinal sulca not quite reaching the apex; the segments very slightly depressed on the apical margin, with a fringe of very short sparse pubescence; segments 3 and 4 with a tuft of long fulvous pubescence at the apical ventral angles; segments 2-5 with an impressed transverse line close to the base; the epipygium broadly truncate at the apex. Hypopygium narrow, projecting beyond the epipygium, slightly broadened and strongly rounded at the apex. The first joint of the tarsi is only about one-quarter shorter than the tibiæ.

Shining black; the mandibles except the extreme apex, the clypeus, the orbits of the eyes narrowed continued almost to the posterior margin of the head, a square spot above the base of each antenna, the pronotum very narrowly interrupted in the middle and with a very large black mark on each side, a short longitudinal line on each side near the anterior margin of the mesonotum along the inner sulca, a narrow line above the tegulæ, the tegulæ, a large irregular mark covering the greater part of the mesopleuræ, a small spot near the posterior margin of the mesonotum, a spot on the centre of the scutellum and one on each side at the basal angles, the postscutellum except a large black spot on each side, a longitudinal band on each side not far from the middle of the median segment, curving downwards at the apex and uniting with another longitudinal band on the side of the segment, the sides of the first abdominal segment, almost uniting near the apex, a very large spot on each side of segments 2-5, more or less broadly separated on the middle of the segment, the sixth segment, the epipygium except a spot at the apex, the middle of the first ventral segment, the apical half of segments 2-5, the sixth segment with a black spot on the middle, the prosternum and the legs golden yellow; the hypopygium ferruginous, fuscous at the apex. Wings flavo-hyaline, nervures fusco-ferruginous.

Length 23 mm., exp. 40 mm.

*Hab.* YUNGAS DE LA PAZ, Bolivia, 3000 ft.

This species is only placed in *Elaphroptera* provisionally.

*Anodontyra tricolor*, Westw.

*Anodontyra tricolor*, Westw., Proc. Zool. Soc. London, iii, p. 71, 1835, ♂.

„ „ André, Zeitsch. Hym. Dipt., vi, p. 317, 1904, ♂, ♀.

*Thynnus albofasciatus*, Sm., Descr. n. sp. Hym., p. 173, 1879, ♂.

*Albofasciatus*, Sm., is certainly a synonym of *tricolor*, Westw. If the species noticed by André under the name of *albofasciatus* proves to be distinct it will have to receive a new name. The position of the ocelli in the female of *A. tricolor* is marked by shallow punctures.

*Cophothynnus*, n. gen.

*Ælurus*, Klug, Physik. Abh. Akad. Wiss. Berlin, p. 42, 1840 (1842).

The name *Ælurus* being preoccupied in Mammalia I suggest the above name in its place.

*C. nasutus*, Klug.

*Ælurus nasutus*, Klug, Physik. Abh. Akad. Wiss. Berlin, p. 43, 1840 (1842), ♂, ♀.

*Thynnus picinus*, Westw., Trans. Ent. Soc. London, p. 133, 1881, ♀.

A female specimen in the British Museum from Petropolis, Brazil.

*C. gayi*, Spin.

*Ælurus gayi*, Spin., Gay, Hist. Chile Zool., vi, p. 305, 1851, ♂.

*Thynnus macilentus*, Sm., Descr. n. sp. Hym., p. 172, n. 40, 1879, ♂.

Var. *Thynnus nigrofasciatus*, Sm., l. c., n. 38, ♂.

*Nigrofasciatus*, Sm., seems to be merely a colour variety.

This species approaches the Australian sub-genus *Lep-teirone*, but has the hypopygium narrow and slightly produced and the second cubital cell less strongly narrowed on the radial nervure.

*Cophothynnus iridipennis*, Sm.

*Myzine iridipennis*, Sm., Descr. n. sp. Hym., p. 181, n. 11, 1879, ♂.

♂. Clypeus scarcely produced, slightly emarginate at the apex. Mandibles bidentate, the outer tooth long and acute. Antennæ a little shorter than the head and thorax, the third joint of the flagellum nearly half as long again as the second. Head narrowed behind the eyes, finely and shallowly punctured, a laminate prominence above the base of each antennæ, the front and cheeks with sparse white pubescence. Eyes very slightly convergent towards the vertex, the inner margin almost straight; the posterior ocelli about twice as far from the eyes as from each other, nearer to the eyes than to the posterior margin of the head. Thorax rather sparsely punctured; the scutellum triangular. Median segment rounded, longer than broad, longer than the mesonotum, closely and shallowly punctured. Abdomen as long as the rest of the insect, fusiform, very closely punctured; with a raised curved mark on each side of segments 2-4, just before the narrowly-depressed apical margin. Hypopygium rounded at the apex and ciliate, projecting a little beyond the epipygium. The first cubital cell is divided, much shorter than the second on the cubital nervure, the third is rhomboidal, also shorter than the second.

The abdomen is less elongate than in most species of the genus and the whole insect is more stoutly built. The three apical joints of the maxillary palpi are very long and slender, combined half as long again as the head. Otherwise as in Smith's description.

*Hab.* EGA (*Bates*).

Fox (Proc. Acad. Philad., 50, p. 72, 1898) places *Elaphroptera carbonaria*, Sm., and *Thynnus æthiops*, Klug, in the genus *Ælurus*. He may prove to be correct, the three apical joints of the maxillary palpi being very long and slender, especially in *carbonaria*, but they are not very near any known species of *Ælurus*, and the female is unknown. *Thynnus anthracinus*, Klug, is closely allied to *æthiops*.

*Eirone mutabilis*, n. sp.

♂. Clypeus slightly advanced, with a vertical triangular truncation at the apex. Head shining, shallowly punctured, the front almost vertical and broad; the antennæ slender, about half as long again as the head, with a short and obscure V-shaped carina between them; the vertex long and broad, the posterior ocelli nearly twice as



far from the margin of the head as from each other. Pronotum narrower than the head, more than half as long as the mesonotum, the anterior margin straight and very strongly raised. Thorax punctured; the scutellum subtriangular, narrowly truncate at the apex. Median segment scarcely more than half the length of the mesonotum, nearly twice as broad as long, obliquely truncate posteriorly, punctured, with a small depression at the base. Abdomen shining, almost smooth, subcylindrical; the second and third segments transversely depressed at the base; the apical segment large, the hypopygium rounded and ciliate at the apex, not projecting beyond the epipygium; the first ventral segment subtuberculate near the base, shallowly divided from the second segment.

Black; the antennæ fusco-ferruginous; the mandibles, clypeus, the anterior margin of the pronotum broadly, a large round spot on the scutellum, the femora, tibiæ and tarsi light yellow.

Length 8-9 mm.

*Hab.* ADELAIDE RIVER, Northern Territory, S. Australia.

Type in B. M.

Allied to *E. scutellata*, Turn., but differs in the shape of the head, clypeus, median segment and abdomen.

## Family SCOLIIDÆ.

Genus *Iswara*, Westw.

*Iswara*, Westw., Trans. Ent. Soc. London (2), i, 7, p. 232, 1851.

*Komarovia*, Radosz., Horæ Soc. Ent. Ross., xx, p. 41, 1886.

*Meria*, section *Komarovia*, Sauss., Grandid. Hist. Madag., xx, p. 249, 1892.

The males of this genus are closely allied to those of *Myzine* proper, from which the genus is almost undoubtedly derived by adaptation to nocturnal habits and desert conditions. Saussure does not consider that the genus can be separated from *Myzine* (*Meria*), but the male of *Myzine tripunctata*, Ross, has the palpi normal, whereas in *Iswara* the maxillary palpi have only three joints in place of six, and the labial palpi three joints instead of four. The antennæ are also very much longer and more slender, and the neuration does not extend to the margin of the wing. The latter point, however, is not of very much importance, as *Myzine* (*Meria*) *timurella*, Sauss., also shows this peculi-

arity, as well as much-enlarged ocelli, though these are not quite as much developed as in typical *Iswara*. It is quite possible, however, that when both sexes are known in this genus and in the allied *Meria* in a larger number of species than is at present the case, Saussure's opinion may prove to be correct, as in this group differences between the females do not invariably correspond closely to those between the males. As I have not been able to obtain specimens for dissection of the mouth parts I cannot give any accurate list of the males that should be assigned to the genus. Saussure places two females in *Komarovia*.

1. *I. tartara*, Sauss., Fedtsch. Turkestan, ii, Scol., p. 38, 1880, ♂, *Meria t.*  
*Komarovia victoriosa*, Radosz., Hor. Soc. Ent. Ross., xx, p. 44, 1886, ♀; l. c., xxiii, p. 309, 1889, ♂, ♀.
2. *I. tamerlanella*, Sauss., Fedtsch. Turkestan, ii, Scol., p. 41, 1880, ♀, *Pseudomeria t.* (*Pseud. tartara* on plate.)  
*Myzine pseudotartara*, D. T., Cat. Hym., viii, p. 126, 1897.

*I. luteus*, Westw., is very nearly allied to *I. tartara*, but has the third cubital cell larger than the second, whereas in *I. tartara* the second is larger than the third. *I. fasciatus*, Sm., *Myzine orientalis*, Sm., *Meria radialis*, Sauss., *Myzine pallida*, Sm., and perhaps *Meria nocturna*, Mor., will probably prove to belong to the genus.

Though all authors seem to have followed Westwood in placing *Iswara* amongst the Thynnidae, I fail to see any cause for removing it from close connection with *Myzine*, and it is quite evident that Saussure would at once have perceived the connection had he been acquainted with Westwood's species.

#### Genus *Pterombrus*, Sm.

- Pterombrus*, Sm., Trans. Ent. Soc. London, p. 302, Pl. 6, 1869.  
*Engycystis*, Fox, Proc. Californ. Acad. Sc. (2), v, p. 262, 1895.

To this genus belong—

1. *P. ænigmaticus*, Sm., Trans. Ent. Soc. London, p. 303, Pl. 6, fig. 1, 1869, ♀, Brazil.

2. *P. confusus*, Sm., Descr. n. sp. Hym., p. 182, n. 12, 1879, ♂ (*Myzine c.*), Ega, Brazil.
3. *P. rufiventris*, Cress., Trans. Amer. Ent. Soc., iv, p. 201, 1872, ♂ (*Myzine r.*).
- " " Fox, Proc. Californ. Acad. Sc. (2), v, p. 263, 1895, ♂, ♀ (*Engycystis r.*), Mexico and Texas.

Fox gives a good description of the genus, but has not connected it with *Pterombrus*. He remarks on the many points in which it differs from *Myzine*. The first two species may prove to be the sexes of one species. The posterior coxæ of the female are contiguous.

Though very distinct I look on the genus as more nearly allied to *Plesia* than to any other Scoliidæ.

#### Genus *Anthobosca*, Guér.

The following species belong to this genus in addition to the Australian species which I have enumerated in a former paper (Proc. Linn. Soc. N.S.W., xxxii, 3, 1907).

#### SPECIES FROM S. AMERICA.

1. *A. albomaculata*, Sm., Descr. n. sp. Hym., p. 181, n. 10, 1879, ♂, ♀ (*Myzine a.*), Ega.
2. *A. bipunctata*, Perty, Delect. Anim. Artic. Brasil., p. 139, 1830, ♀ (*Tiphia b.*), Minas Geraes.
3. *A. antennata*, Sm., Descr. n. sp. Hym., p. 174, n. 2, 1879, ♂ (*Anthobosca a.*), Rio Grande do Sul.
- Cosila iheringi*, Sauss., Grandid. Hist. Madag., xx, p. 234, 1892, ♀.
4. *A. carbonaria*, Burm., Stett. Ent. Zeit., xxxvii, p. 168, 1876, ♀ (*Myzine c.*), Neu Freiburg.
5. *A. erythropyga*, Burm., Stett. Ent. Zeit., xxxvii, p. 169, 1876, ♂, ♀ (*Myzine e.*), Cordova.
6. *A. apicalis*, Sich., Sauss. et Sich. sp. gen. Scol., p. 262, 1864, ♀, S. America (?) (*Cosila a.*).
7. *A. chilensis*, Guér., Voy. de la Coq. Zool., ii, 2, p. 249, 1830 (1839), ♀ (*Scolia (Cosila) c.*), Chili.
- " " Spin., Gay, Hist. Fis. Chile Zool., vi, p. 312, 1851, ♂, ♀.
- Myzine flavicornis*, Sm., Descr. n. sp. Hym., p. 183, n. 16, 1879, ♀.

## SPECIES FROM AFRICA AND MADAGASCAR.

8. *A. insularis*, Sm., Descr. n. sp. Hym., p. 178, n. 4, 1879,  
♀ (*Myzine i.*), Madagascar.  
*Cosila insularis*, Sauss., Grandid. Hist. Madag., xx,  
p. 231, 1892, ♀.
9. *A. donaldsoni*, Fox, Proc. Acad. Philad., p. 549, 1896,  
♀ (*Cosila d.*), Somaliland.
10. *A. errans*, Sm., Descr. n. sp. Hymen., p. 174, n. 1, 1879,  
♂ (*Anthobosca c.*), Zululand.

*Anthobosca antennata*, Sm.

*A. antennata*, Sm., Descr. n. sp. Hym., p. 174, n. 2, 1879, ♂.  
*Cosila iheringi*, Sauss., Grandid. Hist. Madag., xx, Pt. 2,  
p. 234, 1892, ♀.

♀. Clypeus small, triangular and almost smooth. Head shining, sparsely punctured, the antennæ gradually thickened from the base of the flagellum, the joints except the second much broader than long; eyes very feebly emarginate on the inner margin, the ocelli placed well forward, the anterior ocellus nearly as far from the posterior margin of the head as from the base of the clypeus. Pronotum as broad as the head, as long as the mesonotum, the anterior margin depressed and broadly emarginate, finely and closely punctured with a row of larger punctures on the anterior and posterior margins. Mesonotum short, sparsely punctured; scutellum rather large, broadly rounded at the apex; median segment short and broad, truncate posteriorly and slightly broadened from the base, very closely and minutely punctured. Abdomen much longer than the head, thorax and median segment combined, broader than the thorax; finely punctured, more closely at the base of the segments than at the apex, shining; the pygidium rounded at the apex, the epipygium thickly clothed with coarse fulvous pubescence. As in other species of the genus, the intermediate coxæ are widely, the posterior rather less widely, but very distinctly, separated. The radial cell is rounded at the extreme apex. Tarsal ungues bifid.

Black; the mandibles and antennæ fusco-ferruginous; an interrupted transverse band close to the posterior margin of the pronotum, a transverse spot on the posterior margin of the mesonotum, a small spot at the base of the median segment, a spot on the sides of the prothorax close to the anterior angles, a spot on the mesopleuræ at

the base of the anterior wings, an interrupted band on the first dorsal segment of the abdomen and a transverse band on each side of the second, third and fourth segments, most widely divided on the second, yellow; femora, tibiæ and tarsi ferruginous; tegulæ testaceous. Wings hyaline, faintly tinged with yellow, nervures ferruginous.

Length 14–15 mm.

*Hab.* RIO GRANDE DO SUL.

As in other species of the genus the division between the first and second ventral segment is very much less deeply marked than in *Myzine*, and the posterior coxæ separated.

The male sent with this species differs from the type of *antennata* by the slightly longer pronotum, the rather stronger punctures on the head and the very slightly longer antennæ. I do not think these differences sufficient to merit specific rank.

*Anthobosca natalica*, n. sp.

♀. Clypeus flat and subtriangular, the apical margin depressed. Head shining, sparsely punctured, very finely on the vertex, more coarsely on the front. Antennæ inserted as far from each other as from the eyes, the front depressed round their base. Eyes rather small, almost touching the base of the mandibles, but not reaching quite as high as the posterior ocelli. Thorax sparsely punctured, shining; the pronotum as broad as the head, slightly but broadly emarginate anteriorly, very large, nearly twice as long as the mesonotum, extending backwards to the tegulæ, the posterior margin almost straight; the scutellum broadly rounded posteriorly. Median segment rather short, minutely punctured. Abdomen broader than the thorax and longer than the head, thorax and median segment combined, very finely punctured, with a row of large setigerous punctures just before the depressed apical margin of each segment, the pygidium clothed with coarse fulvous pubescence. The tarsal ungues are bidentate, but not so strongly as in most extra-Australian species of the genus, and the anterior tarsi are pectinate. The radial cell is rounded at the apex; the first recurrent nervure is received just beyond the middle of the second cubital cell, the second just before the middle of the third cubital cell.

Black; the pubescence grey, except on the pygidium; the tarsi and spines of the anterior tibiæ fusco-ferruginous, the spines of the intermediate and posterior tibiæ whitish; the tegulæ and the sides and apical margins of the abdominal segments testaceous brown.



Wings pale fusco-hyaline, nervures fusco-ferruginous, the stigma black. Antennæ missing.

Length 12 mm.

*Hab.* MALVERN, Natal (*J. P. Cregoe*).

Type in B. M.

It may be necessary in the future to separate the Australian species of *Anthobosca* from the others in consideration of the difference in the tarsal ungues and the anterior tarsi of the female. In this case the name *Anthobosca* must be retained for the Australian species, and *Cosila* used for the others. But as there are differences of degree in these points, and only one or two species of the genus have been paired so far, it is better to keep them together for the present. In *A. clypeatus*, Sm., the tarsal ungues are bifid.

*Anthobosca lagardei*, n. sp.

♂. Antennæ as long as the thorax without the median segment, stout, the joints as broad as long. Eyes very broadly and slightly emarginate on the inner margin. Head minutely and very closely punctured, rounded; the posterior ocelli half as far again from the eyes as from each other. Thorax and median segment very finely and closely punctured, the pronotum narrowed and slightly depressed anteriorly, the mesonotum with two longitudinal sulcæ on each side, the outer one narrow and shallow, the inner one deep; the scutellum subtriangular, truncate at the apex; the median segment of about the same length as the mesonotum. Abdomen as long as the head, thorax and median segment combined, of nearly equal breadth throughout, the first segment narrowed to the base, opaque; the hypopygium rounded at the apex and unarmed.

Black; the posterior margin of the pronotum, a small transverse spot on the posterior margin of the mesonotum, the tegulæ, a spot on the postscutellum, a spot at the apex of the median segment, a large spot on each side of the epipygium, the extreme apex of the anterior and intermediate femora, the anterior tibiæ, the base of the intermediate and posterior tibiæ, the first joint of all the tarsi; the second joint of the anterior and intermediate tarsi, and the three apical joints of the maxillary palpi dull testaceous yellow.

Length 8 mm.

*Hab.* SYDNEY, N.S.W. (*De la Garde*), January.

Type in B. M.

In my recent revision of the Australian species of *Anthobosca* (Proc. Linn. Soc. N.S.W., 1907) I gave *Cosila* (*Colobosila*) *fasciculata*, Sich., as a synonym of *A. anthracina*, Sm. This is almost certainly a mistake, as the radial cell of *anthracina*, although obtuse at the apex, cannot be said to be truncate.

Cockerell (Bull. Mus. Comp. Zool. Harvard, 1906) has described a new genus *Austrotiphia* for *A. kirbyi*. I have not seen his paper, but the type of his species is in the British Museum, and is certainly identical with *Anthobosca anthracina*, Sm. This species does not seem to differ appreciably in structure from the typical species of *Dimorphoptera*, Sm., except in the radial cell, which is obtuse at the apex.

The genus *Odontothynnus*, Cam. (Rec. Albany Mus., i, 3, p. 161, 1904), containing two species from Grahamstown, Cape Colony, is very closely allied to *Anthobosca* as far as I can judge from the description, and should be placed in the Scoliidæ rather than in the Thynnidæ. His assumption that the females are apterous will probably prove to be erroneous.

In the same publication (i, 5, p. 306, 1905) he refers again to his genus, and suggests that *Anthobosca antennata*, Sm., may belong to it. This is evidently a slip of the pen for *A. errans*, Sm., but in that species the apex of the clypeus is not bidentate, nor are the posterior tarsal unguis simple. These distinctions, unless accompanied by differences in the female, are hardly in my opinion of generic value, and it is hardly advisable in this family to found genera on one sex alone if it can possibly be avoided. The maxillary palpi in *Anthobosca* are six-jointed, not as Cameron, following Ashmead, states, five-jointed.

The genus *Eluroides* described as a Thynnid by Tullgren (Arkiv. Zool., i, 1904) for *A. sjöstedti* is erroneously placed, and is synonymous with *Apenesia*, Westw., belonging to the Proctotrupidæ. It appears, therefore, that unless we place *Methoca* in the Thynnidæ, the family does not occur in Africa. *Methoca* in my opinion has had an origin independent of the Thynnidæ.